

FLIGHT

First Aero Weekly in the World.

Founder and Editor: STANLEY SPOONER.

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport.

OFFICIAL ORGAN OF THE ROYAL AERO CLUB OF THE UNITED KINGDOM.

No. 851. (No. 38, Vol. VII.)

SEPTEMBER 17, 1915.

[Registered at the G.P.O. as a Newspaper.] [Weekly, Price 3d. Post Free, 3½d.]

Flight.

Editorial Office: 44, ST. MARTIN'S LANE, LONDON, W.C.
Telegrams: Truditor, Westrand, London. Telephone: Gerrard 1828.
Annual Subscription Rates, Post Free.
United Kingdom ... 15s. od. Abroad ... 20s. od.

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EDITORIAL COMMENT.

The R.N.A.S. Last week we were able to publish the bare official notification of the appointment of Rear-Admiral C. L. Vaughan-Lee to the supreme post of Director of Air Services, under the reorganisation scheme of the Admiralty Air Department, necessitated by the rapid expansion of the Royal Naval Air Service, both in respect of *personnel* and *matériel*. This appointment of a flag officer to take charge of the department is one which it has been known was in contemplation, and its formal completion is yet another earnest of the highly important position to which the air services of the Navy have attained. Whilst making this appointment, the Admiralty also recognise the work so magnificently and unremittingly carried out by Commodore Murray F. Sueter, C.B.—who has been, as Director of the Air Department, responsible for the organisation from the outset, and for the conduct of the R.N.A.S. up to its present state of efficiency—by promoting that invaluable officer to the rank of Commodore First Class, and placing in his charge the *matériel* side of naval aeronautical work with the new title of Superintendent of Aircraft Construction. Commodore Sueter, who had previously proved himself one of our most distinguished submarine officers, should find in his

new office still further scope for his great organising gifts, to the good of the nation. Rear-Admiral Vaughan-Lee's past record is such that the Naval Air Service cannot help but being benefited under his hand, now that the rapid growth of this side of our defence has called for the still further development of the air-fleet.

The latest addition to the executive officers of Admiral Sir Percy M. Scott, Bt., to take charge of the gunnery defences of London against attack by enemy aircraft is a strong and very desirable move, as there has been a growing feeling with the public that more effective measures were possible for combating the almost nightly raids which have lately been in evidence, than the methods hitherto in operation. Congratulations are, therefore, but natural to all concerned, and we shall look forward to the still further advance of aeronautics in the grand scheme for crushing the Hunnish blonde beast.

And the Raids.

Zeppelin weather time was in the natural sequence of events due this month, and it has truly arrived and been utilised during the past ten days or so. The German staff and pilots must indeed have had a surfeit of piratical adventure, which it has been found necessary to justify in various German newspapers in so blatant a manner, as to suggest that even in the justifier's mind there is a great deal to explain and to be ashamed of in these murdering excursions. One after another have these raids followed each other in quick succession, yet with as much—or little—military result as ever. Murder of innocents and destruction of a certain amount—comparatively unappreciable—of property is once again the net result. What pride these cultured Germans will feel in the years to come when their deeds stand out in history in all the cold calmness of official record. To-day they profess to glory in their work. What is thought here of their prowess is perhaps best exemplified in the utterances of the Archdeacon of London last Sunday at St. Paul's, when he spoke as follows:

"I need not go further back than last Wednesday to tell you that battle has changed into murder. Speaking with all the restraint that is due from every preacher as well as from the Press, and with the knowledge and consent of the Censor, I tell you that to one hospital alone were taken the dead bodies of little children of 15, 10, 7, and 5, and one little baby, so that the nursery became a slaughterhouse.

"Of the Imperial murderer who allowed it, if he did not order it, all we can say is, in the words of the psalmist, 'I will set before thee the things that thou hast done.'"

The question of reprisals in kind is not unnaturally rampant, and there is much to condone such a course. In fact so exceptional in the world's history is the situation that we cannot but feel that some similar action on our part would be fully justified, and is the only possible way immediately to bring home to the bestial Hun the true prospective of his cultured methods. There should in any case be a settling hereafter in cash and kind, and it is to be hoped that when peace comes it will not be of the patched-up variety which will preclude us from taking toll to the full extent.

When last week we wrote our article on the Zep. Bogey, we had no facts to guide us in regard to actual damage and casualties. Those now available of the Tuesday night's proceedings as well as of the following night's raid—the rest stand at *nil*—are sufficiently large to make the British people feel more than ever the necessity for utterly crushing a people who can commit such senseless murder. The results in no way require one word to be modified of what we wrote last week, sincerely as our sympathy is with those and their families who have been individually penalised by these monsters. Their work only once again punctuates the positive want of military results attached to these unnatural attacks.

The German *canaille* are certain they are going to be victors or they would never dare to perpetrate the hideous and inhuman crimes to which they have set their seal. If they be correct as to ultimate victory, a tribe of brute beasts such as these have nothing to think about or to consider. What their natures are and what may be expected from these savages is emphasised and endorsed by that observant student of character, Rudyard Kipling. In concluding one of the series of remarkable articles on the war which he is contributing to the *Daily Telegraph* he summarises their bestialities as follows:—

"Or as a woman put it more logically, 'What else can we do? Remember, *we* knew the Boche in '70 when *you* did not. We know what he has done in the last year. This is not war. It is against wild beasts that we fight. There is no arrangement possible with wild beasts.' This is the one vital point which we in England *must* realise. We are dealing with animals who have scientifically and philosophically removed themselves inconceivably outside civilisation. When you have heard a few—only a few—tales of their doings, you begin to understand a little. When you have seen Rheims, you understand a little more. When you have looked long enough at the faces of the women, you are inclined to think that the women will have a large say in the final judgment. They have earned it a thousand times."

With such material to work upon, ordinary civilised methods are hopeless. As leave endeavour to talk logic to the wolf or the adder. It is only by sheer weight of consequences that such creatures can be repressed, and even then the task would almost seem hopeless. But exceptional cases require exceptional treatment. We can conceive that nothing short of physical retribution in prospect is likely to appeal to this race of murderers. Why not let it be so, and announce right away now what may be considered their just due in connection with the Zep. piratical visits when the accounts come to be settled. As we have suggested, the idea of losing in the end is not in the minds of the bulk of the German nation. But, on the other side, Britons

feel that victory is certain for Great Britain and her Allies. And rightly so, we believe. It will be for us to call the tune presently, therefore, and we can conceive no punishment too great to mete out to these criminals in return for their murder of innocent men, women, and children—dwellers in ordinary towns. We would humbly suggest that an intimation to the effect that, at the conclusion of hostilities due investigation will be made to identify those directly associated with these heinous crimes, and for each and every civilian man, woman, or child killed or seriously wounded due toll shall be paid in kind. That is for each such civilian, man, woman, or child, an officer or man shall be given their *quietus*, facing the wall. If the *personnel* of the Grand Staff—and it should be seen that these gentry should understand that they will primarily be held personally responsible—officers and men of the immediate service concerned be not sufficient to supply the required quota, then other sections of the Grand Staff and Army which have been concerned with some of the more diabolical deeds on land shall be drawn upon in the same ratio until the bill of judgment is satisfied to the full. We admit there is no turning the other cheek idea about this, and we don't intend there to be. It is, we think, under the conditions, not a super-bloodthirsty retaliation—it is if anything too mild if its purpose of bringing home to the whole tribe of wild beasts the real nature of their crimes is to be achieved. In this connection the following suggestive stanzas appeared in the *Daily Chronicle* last week over the initials "A.W." :—

THE ZEPPELIN HARVEST.

Let us scatter seeds of Culture, cried the bold "Burnhardy" crew,
May the eagle take the vulture as preceptor of the blue;
Since our ships are out of action and we're fain to burn our boats,
We will compass Bull's distraction with the sowing of wild oats.

So they braved the Empyrean with a load of Culture's tares,
With a prowess Herculean slaying infants unawares,
And the frightful seed they scattered reaped a harvest there and then,

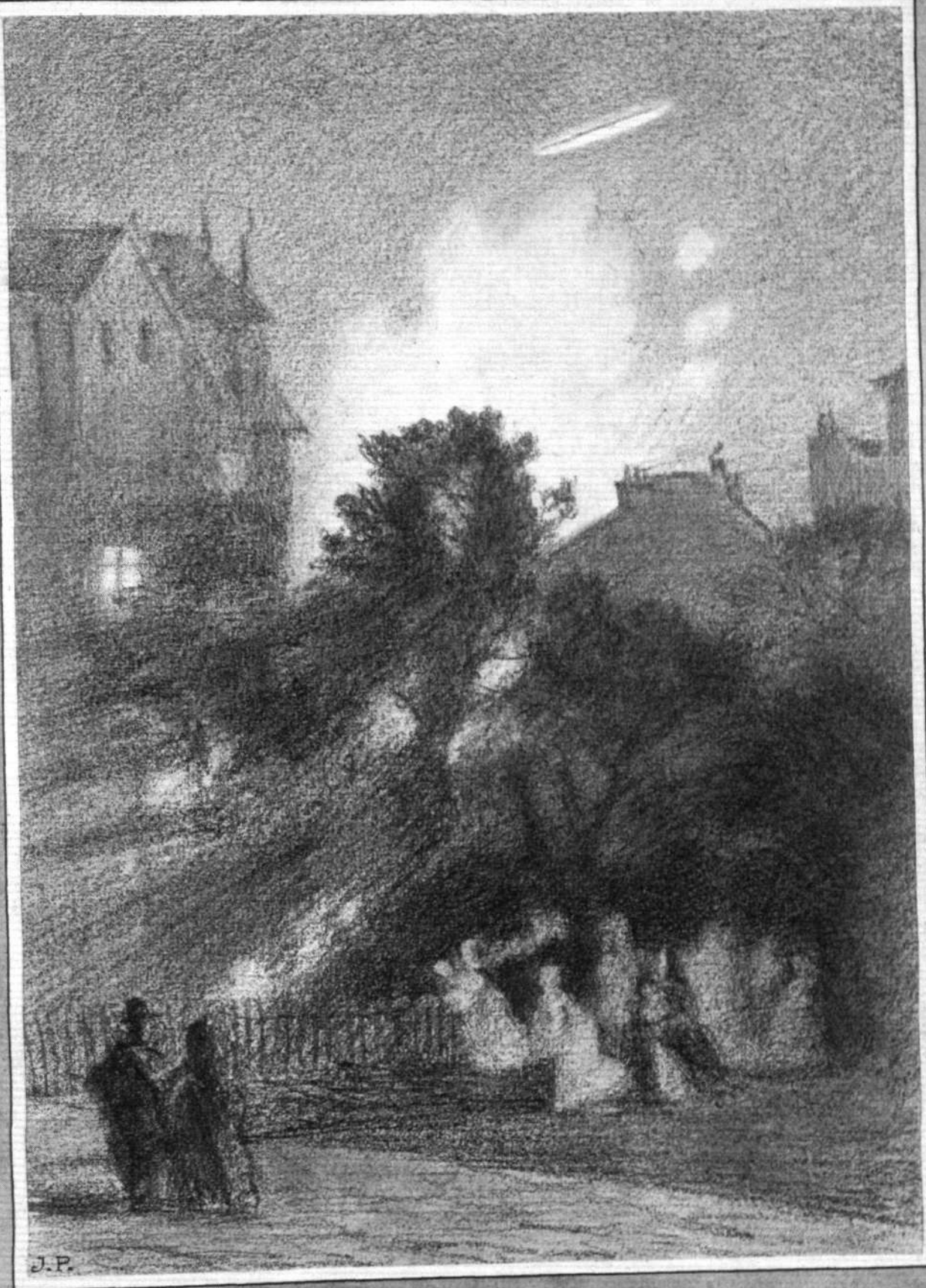
Every cradle burned and battered raised a squad of khaki men.

Men may slumber, but God knoweth, Nemesis doth never sleep.
Whatsoever a man soweth, he a hundredfold shall reap,
And the darkest depths of error in the Teutons' pathway lie,
As they scatter seeds of terror for their reaping by and by.

Specific contrasts are not needed to emphasise our air pilots' different method of procedure, but a refreshing reminder of our officers' daring is to be found in the reports on the mid-air fight on Tuesday last, recorded elsewhere, between a British machine and one of the latest German "battle-planes" with machine guns fore and aft.

Some other Issues.

Whatever slight respect to neutrals was paid by the Germans in the earlier days of the war, has entirely gone by the board now, whether it be on the water or in the air. The continual violation of Dutch neutrality by the Zeppelins passing over Holland in pursuance of their piratical visits to these shores is not even apologised for. It just happens, the while some of the Dutch gunners take pot shots at the intruders. Whether any future diplomatic action may result is a moot question, but it should serve as a reasonably decent excuse for trouble, should it be found advisable and politic for Holland to presently take a more direct interest in the European proceedings at present occupying most of this side of the world. Out of this the whole question arises again how can it be worth the Huns' while, seeing that the sum total of casualties is almost ludicrous when compared with the anticipated



THE CIVILISED METHODS OF THE GERMAN BARBARIANS.—Impression of an incident during one of the Zeppelin raids last week in the "Eastern Counties." From an original drawing by J. Prochazka.

results from the carefully prepared plan of campaign feverishly worked up for years past, by which the British Empire was to be brought to its downfall, whilst—leaving out the cost—by reports, there would appear to be more than a doubt as to all the craft reaching home again as safely and peacefully as is officially claimed (per German wireless) or as might be desired by their instigators.

As to the localities visited (again per German wireless)—well, that's another matter altogether. But as it emerges from our Admiralty's official communications that London *has* been reached, there is, perhaps, no harm in suggesting that it has been rumoured that a good deal of guidance is given to the marauders by certain railway systems through the medium of their lighted carriages and engine "emissions." Possibly some method might be evolved to "screen" these said "emissions." As to the carriage illuminations, there can be no excuse. No difficulty exists in this direction which should not be quickly remedied by "Defence of the Realm Act" notification. Perhaps the authorities will oblige in this direction besides making special provision for cutting off the invaders, *en route*.

Regarding precautions against the dropping of the bombs, it is well that a reminder has been given for irresponsible people not to interfere with the lighting arrangements of the streets, which may lead to worse calamities. Leave that to the authorities. The disseminator of wild and ridiculous rumours should be duly honoured by notice from another of the authorities. To cause needless alarm by helping to spread false accounts of damage supposed to have been done, is the act of a lunatic or a friend of the enemy. Moreover, it is an offence under the Defence of the Realm Act which states that "no

person shall by word of mouth or in writing spread reports likely to create alarm among any of the civilian population."

As to the procedure when information comes to hand of the approach of Zeppelins, the method adopted by the Vice-Lieutenant for Herts—The Earl of Essex—to counter any possible damage to the district during an air-raid has in some respects much to commend it, and might be favourably considered by other bodies in authority. The Special Air-Raid Committee, of which the Earl is chairman, besides issuing the usual notifications from certain official sources as to stampeding for the nearest cellar or ditch when a Zeppelin visit is anticipated, have organised matters for their district, embracing arrangements for public lights to be reduced or extinguished immediately reliable information is received that hostile aircraft are in the vicinity. In a notice issued by this Central Organising Committee the following further advice is given—

"Members of the public are requested to turn off all taps and switches, and take other necessary precautions for safety immediately it comes to their knowledge, either by the sounding of warning blasts on a siren, the ringing of bells, or the sudden reduction or extinction of public lights, that hostile aircraft is in the neighbourhood. Care should then be taken to prevent any light in a house being visible from outside."

The suggested multiplication of warning sounds seems somewhat weird, and might with advantage, we think, be modified, as irrespective of the din which would arise, giving very audible guidance to the air-pirates up above, such a multiplicity of sounds might easily lead to confusion amongst those for whose benefit the hullabaloo had been set going.

The Roll of Honour.

THE Secretary of the Admiralty has announced the following casualties:—

Under date September 4th (Expeditionary Force):

Injured.

Flight-Commander James W. O. Dalgleish, R.N.

Under date September 8th:

Killed.

Flight Sub-Lieutenant Gerald W. Hilliard, R.N.

Undated:

Wounded.

Driver A. S. Clark and Gunner B. O. Webb, both R.M.A. Anti-Aircraft Brigade.

The following casualties in the Expeditionary Force have been reported from General Headquarters:—

Under date September 2nd:

Died of Wounds.

Capt. J. A. Liddell, V.C., Argyll and Sutherland Highlanders, 3rd Batt., attached R.F.C.

The Defences of London.

IN reply to questions in the House of Commons on Tuesday, Dr. Macnamara, Secretary to the Admiralty, said that no decision had yet been arrived at with regard to the suggested transference of the Anti-Aircraft (London) Corps from the Admiralty to the War Office. Admiral Sir Percy Scott had been appointed by the Admiralty to take charge of the aerial defence of London, and had already taken up his duties.

In reply to further questions, Dr. Macnamara said that Sir Percy Scott had been appointed by the Admiralty, and for the time being, at any rate, this service was under the Admiralty.

In the House of Lords on Tuesday, Lord Strachie had given notice of his intention to ask the Secretary for War whether the result of the Zeppelin raids on London last week were not a proof

Missing.

Second Lieutenant E. R. C. Scholefield, Royal Flying Corps.
Captain F. J. C. Wilson, Cameronians (Scottish Rifles), 6th Batt. (T.F.), attached R.F.C.

Under date September 6th:

Wounded.

Lieutenant C. A. Ridley, Royal Fusiliers, attached R.F.C.

Missing.

Captain W. C. Adamson, Royal Flying Corps.

The following casualty in the Indian Forces has been reported from General Headquarters:—

Missing.

Lieutenant E. C. Braddyll, 10th Lancers, attached R.F.C.

It has been unofficially announced that Flight-Lieutenant David Keith-Johnston, R.N.A.S., was killed in action at Ostende on August 10th, and that his brother—Probationary Flight Sub-Lieutenant Macfie Keith-Johnston—was accidentally killed at Eastchurch on September 12th.

that anti-aircraft guns were of little use against aerial attack; and whether the establishment of a landing place for our aircraft on the south side of Hyde Park was not desirable, so that we might follow the methods adopted so successfully in Paris by patrolling regularly the London skies, and by posting other aircraft in Hyde Park in readiness to fly should the approach of Zeppelins be signalled. The noble Lord said he had been asked by the Civil Lord of the Admiralty to postpone the question. He quite understood the reason for postponing the question because, in view of the announcement made in that day's papers, it was evident that the intention was to reorganise the whole of the precautions against air raid. He hoped that later on the Government would make a statement which would answer the suppositions in his question.

The Duke of Devonshire (Civil Lord of the Admiralty) said if it was possible he would make a statement upon the subject later on.

AIRCRAFT WORK AT THE FRONT.

OFFICIAL INFORMATION.

British.

General Headquarters, Sept. 9th.

"A GERMAN aeroplane was brought down by rifle and machine-gun fire on September 1st, falling close behind the German lines south-east of Hooze.

"A second German aeroplane on September 5th was brought down by one of our fighting machines, and fell behind the enemy's lines—opposite the southern portion of our front."

French.

Paris, Sept. 8th. Afternoon.

"Five German aeroplanes this morning dropped bombs on the plateau of Malzeville, where they did no damage, and on Nancy, where some victims are reported.

"In co-operation with the British Naval Air Service, our machines bombarded the aviation sheds at Ostend. One of our air squadrons also dropped some sixty shells on the aviation ground at Saint Medard and on the railway station at Dieuze."

Paris, Sept. 8th. Evening.

"In consequence of the bombardment of Nancy by German aeroplanes a French aerial squadron dropped bombs on the military establishments of Frescaty and the Gare des Sablons, at Metz."

Paris, Sept. 9th. Afternoon.

"Some fifty shells were dropped yesterday by our aeroplanes on Challerange railway station.

"On the night of the 8th one of our dirigibles bombarded the railway station and factories at Nesle."

Paris, Sept. 10th. Afternoon.

"Our aeroplanes this morning bombarded the mines and the batteries in the Nonnenbrück Wood, as well as the railway station of Lutterbach.

"Some thirty shells were dropped on the railway station at Grand Pré."

Paris, Sept. 10th. Evening.

"Two German aeroplanes dropped some bombs on Compiègne, aiming particularly at the hospital establishments. There were no casualties, but only some unimportant material damage was done.

"An Aviatik was forced to land in our lines near Hangest, in Santerre. The aviators were taken prisoners.

"Six German machines attempted this morning to fly over Ste. Menchould, but were obliged to make a right-about turn in face of the fire of our batteries."

Paris, Sept. 11th (by Wireless).

"An Amsterdam message announces that a Zeppelin was blown up on Wednesday morning at Stockel, near Brussels— all the crew perished."



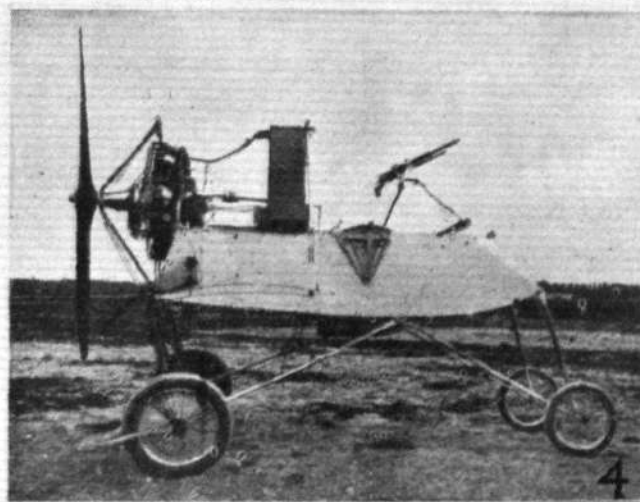
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TROPHIES OF WAR.—1. Fuselage of a Russian monoplane (Nieuport) brought down by the Germans. 2. The remains of a Russian Nieuport. 3. Wreck of a Russian aeroplane being carted away by Germans. 4. Nacelle of a captured French Voisin biplane.

Paris, Sept. 12th. Afternoon.

"Enemy aeroplanes threw some bombs yesterday on Compiègne. Our aeroplanes effectively bombarded with heavy bombs the aviation sheds at Brayelle."

Paris, Sept. 13th. Evening.

"By way of reprisal for the recent bombardments of Lunéville and Compiègne by the enemy aeroplanes, a squadron of 19 aeroplanes this morning flew over the town of Treves, on which about 100 bombs were dropped. The station and the Reichsbank were clearly hit."

"The same squadron, after returning to its base and landing, set out again in the afternoon and dropped 58 bombs on the station of Dommary Barancourt. Other aeroplanes bombarded from a low altitude the stations of Donau-Eschingen on the Danube (in Baden, where the Danube rises) and of Marbach in a district where movements of troops had been reported. They were able to note the effectiveness of their fire on the objectives aimed at and on a moving train, which was compelled to stop."

Paris, Sept. 14th. Afternoon.

"Our aeroplanes bombarded the junction of Bensdorf near Morhange and the enemy's cantonments of Chatel en Argonne, and at Langemarck to the north of Ypres."

Russian.

Petrograd, Sept. 11th.

"A hostile Zeppelin flew over Baltic port yesterday and threw some bombs. Our seaplanes dropped bombs on German ships in Windau harbour."

"Near the station of Ponemounek our artillery brought down a German aeroplane which was bombarding a hospital train."

"In the Black Sea, near the Crimean coast, enemy submarines are reported. Torpedo boats and seaplanes have been sent to locate them."

Italian.

Rome, Sept. 8th.

"A squadron of enemy aircraft yesterday made two flights in quick succession over one of our flying camps in the lower Isonzo region. They dropped thirty-seven bombs, which, fortunately, caused no casualties or material damage. During the second raid, while shells were bursting, our aircraft boldly rose, but the enemy squadron rapidly flew away. During their retreat the enemy dropped bombs on one of our military camps, and killed three soldiers."

Rome, Sept. 9th.

"One of our aircraft yesterday morning bombarded the railway station at Klause, east of Santa Lucia, scoring several hits and damaging also a neighbouring bridge over the Baca."

Rome, Sept. 10th.

"Enemy aircraft once more attempted sudden raids here and there yesterday. San Giorgio Bagni di Sella, in the valley of the Maggio Torrent (Biento), and Grado, on the Lagoons, were bombarded, but no damage was done."

Rome, Sept. 12th.

"In the zone of the Lower Isonzo our aerial reconnaissances established that the enemy were building fresh defensive works of an almost permanent character."

"Two of our aeroplanes effectively bombarded the encampments near Pacchiasella."

German.

Berlin, Sept. 8th.

"A French armoured aeroplane was shot down by a German battle aviator north of Le Mesnil (in the Champagne). It crashed to earth in a burning condition. The occupants were killed. An enemy aeroplane attack on Freiburg, in Baden, was ineffective."

Berlin, Sept. 9th.

"The German aircraft squadron has attacked Nancy."

Berlin, Sept. 11th.

"Our airships heavily bombarded the railway centres of Vilejka, east of Vilna, and Lida."

Berlin, Sept. 12th.

"In the morning of Sept. 12th several Russian hydroplanes attacked a small German cruiser off Windau. Eight bombs were dropped, which missed their aim. One enemy aeroplane was shot down and taken to Windau. The crew, consisting of two Russian officers, were taken prisoners."

"Hostile airmen yesterday morning dropped bombs on Ostend, but no damage was done and nobody was wounded."

Berlin, Monday.

"An enemy aeroplane was shot down near Courtrai, and the occupants were taken prisoners. A second aeroplane was shot down over the wood of Monfaucon, to the north-west of Verdun. The occupants were found dead."

Berlin, Sept. 14th.

"Hostile aeroplanes dropped bombs on Trier, Moerschingen, Chateau Salins, and Donaueschingen."

"Near Donaueschingen a passenger train was attacked by a machine gun, some persons being killed. An aeroplane of the squadron operating over Trier was shot down near Lommelingen, south-west of Fentsch."

"During the night bombs were dropped on the railway station at Lida."

THE BRITISH AIR SERVICES.

UNDER this heading are published each week the official announcements of appointments and promotions affecting the Royal Naval Air Service and the Royal Flying Corps (Military Wing) and Central Flying School. These notices are not duplicated. By way of instance, when an appointment to the Royal Naval Air Service is announced by the Admiralty it is published forthwith, but subsequently, when it appears in the LONDON GAZETTE, it is not repeated in this column.

Royal Naval Air Service.

THE following appeared among the Admiralty announcements of the 7th inst. :—

The following have been entered as Probationary Flight Sub-Lieutenants, for temporary service : A. Spencer, to date Sept. 5th ;

H. Allen, to date Sept. 5th ; T. Angus, W. Tait, and C. Jamieson, all to date Sept. 11th ; K. Hooper and C. Murray, both to date Sept. 12th.

Temporary Sub-Lieut. G. Nathan, promoted to temporary Lieutenant, R.N.V.R. To date Sept. 4th.

H. French, granted temporary commission as Sub-Lieutenant, R.N.V.R., and appointed to the "President," additional. To date Sept. 4th.

The following appeared among the Admiralty announcements of the 8th inst. :—

Temporary Warrant Telegraphist (R.N.R.) J. C. Mitchell entered as Probationary Flight Sub-Lieutenant, for temporary service, with seniority of Sept. 6th, and appointed to "President," additional, for R.N.A.S.

The following appeared among the Admiralty announcements of the 9th inst. :—

Temporary Flight Sub-Lieut. the Hon. A. S. Byng granted the acting rank of temporary Flight-Lieutenant, with seniority of Aug. 9th.

Temporary Sub-Lieut. (R.N.V.R.) J. H. Lee promoted to the rank of temporary Lieutenant (R.N.V.R.), with seniority of Sept. 7th.

J. A. Nash and W. H. Hope have been entered as Probationary Flight Sub-Lieutenants, for temporary service, with seniority of Sept. 7th, and appointed to "President," additional.

Temporary commissions have been granted as follows :

Lieutenant (R.N.V.R.) : H. B. Pratt, with seniority of Sept. 7th, and appointed to "President," additional.

Sub-Lieutenants (R.N.V.R.) : B. N. Wallis, A. Scarrisbrick, F. Smythe, and H. C. Mallett, with seniority of Sept. 7th, and E. H. Bellew, with seniority of Sept. 8th, and all appointed to "President," additional.

The following appeared among the Admiralty announcements of the 10th inst. :—

Temporary Sub-Lieuts. S. T. Panther and F. E. Rogers promoted to temporary Lieutenants, R.N.V.R., with seniority Sept. 8th.

The following appeared among the Admiralty announcements of the 13th inst. :—

The following entries have been made :

Probationary Flight Sub-Lieutenants (temporary) : F. S. McGill, with seniority of July 23rd; W. B. Evans, with seniority of Aug. 7th; and A. L. Greer, with seniority of Sept. 11th, and all appointed to "President," additional.

Warrant Officer, Second Grade (temporary) : H. Samuels, with seniority of Sept. 11th, and appointed to "President," additional.

The following appeared among the Admiralty announcements of the 14th inst. :—

The undermentioned have been entered as follows :—

Probationary Flight Sub-Lieutenants (temporary) : B. R. Lee (leading mechanic), with seniority of Sept. 12th; H. W. Mortimore, A. H. Curtis, E. M. King, C. D. Booker, and H. G. Hall, with seniority of Sept. 18th, and all appointed to "President," additional, for R.N.A.S.

Warrant Officer, 2nd Grade (temporary) : R. J. Finch, with seniority of Sept. 13th, and appointed to "President," additional, for R.N.A.S.

Temporary commissions, R.N.V.R., have been granted as follows : W. Higginbotham, as Lieutenant, with seniority of Sept. 13th, and appointed to "President," additional, for inspectional duties in R.N.A.S.; and A. G. T. Applin, as Sub-Lieutenant, with seniority of Sept. 13th, and appointed to "President," additional, for R.N.A.S.

Royal Flying Corps (Military Wing).

THE following appeared in a supplement to the *London Gazette* issued on the 8th inst. :—

Supplementary to Regular Corps.—Second Lieut. (on probation) Keith D. P. Murray is confirmed in his rank.

Beaufoi J. Moore to be Second Lieutenant (on probation). Aug. 23rd, 1915.

D.S.O. for Squadron-Commander Bigsworth.

IN a supplement to the *London Gazette* published on Monday it was announced that the King had been graciously pleased to give orders for the appointment of the following officer to the Distinguished Service Order in recognition of the services mentioned :—

Squadron-Commander ARTHUR WELLESLEY BIGSWORTH, R.N.

For his services in destroying single-handed a German submarine on the morning of August 26th, 1915, by bombs dropped from an aeroplane. Squadron-Commander Bigsworth was under heavy fire from the shore batteries and from the submarine whilst manœuvring for position. Nevertheless, displaying great coolness, he descended to 500 ft., and after several attempts was able to get a good line for dropping the bombs with full effect."

British Honours for French Aviators.

IT was also announced that the King had been graciously pleased to give orders for the award of the Distinguished Service Cross to the following officers :—

Monsieur le Lieut. de vaisseau HENRI JULIEN PAUL DE L'ESCAILLE, de la Marine française.

For his services in command of the French Seaplane Squadron in Egypt. During the earlier part of this year, when hostile patrols were in touch with the Allied forces holding the Suez Canal, Lieutenant de vaisseau de l'Escaille, as pilot, made some

The following appeared in a supplement to the *London Gazette* published on the 9th inst. :—

Flying Officers.—Aug. 13th, 1915: Second Lieut. J. H. Herring, Special Reserve; Second Lieut. C. D. Danby, Tyne R.E., T.F.; temporary Second Lieut. H. G. Dean, York and Lancaster Regt., and to be transferred to the General List.

Supplementary to Regular Corps.—To be Second Lieutenants (on probation): Donald Easdale; Aug. 23rd, 1915. Bowen May; Aug. 30th, 1915.

The following appeared in the *London Gazette* of the 10th inst. :—
Squadron-Commander.—Capt. Hon. J. D. Boyle, Rifle Brig., from Wing-Adjutant, and to be temporary Major whilst so employed. Aug. 3rd.

Assistant Equipment Officers.—Second Lieut. C. Defries, S.R.; June 22nd. Aug. 19th: Second Lieut. F. W. Wright, S.R.; Second Lieut. J. E. Marriott, S.R. Second Lieut. W. M. N. Dunkley, S.R.; Aug. 31st. Rank of Lieutenant H. F. T. Blowey, R.A., as now described, not as in *Gazette* of Aug. 17th.

Supplementary to Regular Corps.—Second Lieutenants (on probation) confirmed in rank: J. P. C. Cooper and C. C. Godwin. To be Second Lieutenants (on probation): E. H. Pullinger; Aug. 5th. Aug. 9th: A. B. Adams and H. Tomlinson. F. G. Hogarth; Aug. 19th. Aug. 23rd: G. G. Samuel and S. E. Cowan.

The following appeared in a supplement to the *London Gazette* issued on the 13th inst. :—

Supplementary to Regular Corps.—Second Lieutenants (on probation) confirmed in their rank: Kelman K. Horn, Gardiner G. Hubbard and Douglas A. Hansard.

To be Second Lieutenants (on probation): James L. Chalmers; Aug. 16th, 1915. Frederick C. A. Wright; Aug. 25th, 1915. Aug. 29th, 1915: E. Taylor, W. Hart, K. P. MacNamara, B. W. Waits, C. Fergusson, F. Shumaker, E. Powell and A. Heywood.

The following appeared in the *London Gazette* of the 14th inst. :—

Flying Officers.—Aug. 23rd, 1915: Second Lieut. J. P. C. Sewell, Special Reserve; Second Lieut. E. A. B. Rice, S.R.; Second Lieut. J. P. C. Cooper, S.R.; Second Lieut. N. G. Smith, Highland L.I., and to be seconded; Second Lieut. B. C. McEwen, S.R.

Memoranda.—Algernon J. Insall to be temporary Second Lieutenant for service with the Royal Flying Corps; March 12th, 1915. (Substituted for the notification in the *Gazette* of April 12th, 1915, under Special Reserve, Royal Flying Corps.)

Charles T. Cleaver to be temporary Second Lieutenant for service with the Royal Flying Corps; June 21st, 1915. (Substituted for the notification in the *Gazette* of July 6th, 1915, under Special Reserve, Royal Flying Corps.)

Supplementary to Regular Corps.—Second Lieut. (on probation) Frank Hudson is confirmed in his rank.

To be Second Lieutenants (on probation): Charles E. Holaway; Aug. 16th, 1915. Douglas Brooks; Aug. 26th, 1915. Digby Cleaver; Aug. 28th, 1915. William G. Pender; Aug. 30th, 1915. Percy E. L. Gethin to be Second Lieutenant; April 1st, 1915.

Central Flying School.

THE following appeared in the *London Gazette* of the 3rd inst. :—
Instructor.—Lieut. (temporary Capt.) Hon. W. F. F. Sempill (Master of Sempill), Special Reserve, a Flight Commander, Military Wing, vice Capt. G. B. Stopford, R.A. Aug. 6th.

brilliant and daring reconnaissances over long stretches of the Sinai Peninsula, where engine failure meant certain destruction to plane and to pilot. On these occasions, although under fire, by his skill and courage he never failed to secure valuable information as to the enemy's movements.

Monsieur le Lieut. de vaisseau ALFRED LOUIS MARIE CINTRÉ, de la Marine française.

For his services as a seaplane pilot in Egypt. He displayed great skill and intrepidity in a reconnaissance over Bir Saba on April 11th, 1915, when his plane was subjected to a heavy shrapnel and musketry fire, and was hit in more than one place. With consummate coolness, Lieutenant de vaisseau Cintré circled over Bir Saba again and again until the number and position of the enemy were observed. He then turned his plane towards the ship, and, though the engine was damaged, succeeded by very skilful handling in traversing the distance of thirty-five miles to the coast line in safety.

London's Defences Against Aircraft.

THE following announcement was made by the Admiralty on Monday evening :—

"Admiral Sir Percy M. Scott, Bart., K.C.B., K.C.V.O., LL.D., has been appointed to take charge of the gunnery defences of London against attack by enemy aircraft."

THE "X" AIRCRAFT RAIDS.

IN view of the decision of the Government not to allow details of aircraft raids to be published we are as before (see issue of June 11th, 1915) giving to each one an index number. Eventually, when details are available, we shall give the respective information under these index numbers, which will facilitate easy reference to each particular raid.

The following has been officially issued, the date in brackets indicating when the statement was issued:—

"X7" Raid, September 7th (September 10th).

"Since the casualties caused by hostile aircraft on the night of Tuesday, the 7th, were published, the bodies of the three persons who were described as missing have been found, and four of the persons who were seriously injured have died.

"The total number of deaths due to the attack on the 7th is, therefore, seventeen—five men, six women, and six children."

"X8" Raid, September 8th (September 9th).

"Hostile aircraft visited the Eastern Counties and the London District last night and dropped incendiary and explosive bombs.

"At midnight a few casualties had been reported, and some fires, which were then well under control.

"The number of casualties will be communicated to the Press in the course of the day."

Later.

"The total casualties reported from all areas as the result of last night's attack by enemy aircraft are as follows:—

| | Men. | Women. | Children. | Total. |
|---------------|------|--------|-----------|--------|
| Killed ... | 12 | 2 | 6 | 20 |
| Injured— | | | | |
| Seriously ... | 8 | 4 | 2 | 14 |
| Slightly ... | 38 | 23 | 11 | 72 |
| Total ... | 58 | 29 | 19 | 106 |

"All the above are civilians except four soldiers (one killed, three injured)."

German Versions.

Berlin, Sept. 9th.

"Our naval airships attacked during the night of September 8th–9th with good results the western part of the city of London, great factories near Norwich, and the harbour works and iron works at Middlesbrough.

✱ ✱

Another Zeppelin Wrecked.

THE *Morning Post* correspondent at Amsterdam on September 10th, claimed that a British aviator had a few days previously, totally destroyed a Zeppelin at Berchem, near Brussels. According to the *Tyd*, however, the airship when about to land came into collision with a chimney stack and was completely overturned and destroyed.

As nobody is allowed to approach the wreck, it was impossible to state what became of her crew, but it was generally believed that the crew perished.

The Zeppelin Raiders.

THE *Maasbode* reported from Roosendaal that on the night of the 9th inst. a Zeppelin was sighted travelling at a great height from Belgium. It was immediately fired at by the Dutch frontier guards, whereupon it returned in a southern direction.

According to the German papers Count Zeppelin personally directed the recent attack on London. Some say that the Count only directed the expedition from the base at Emden, but others state that he was on board one of the airships.

From Hippolitushoef, on the Island of Wieringen, the *Het Volk* learnt that at five o'clock on Monday morning a Zeppelin passed over the island, coming from the south-west and travelling north-east. The dirigible was flying rather low, so that the crew could be

"Heavy explosions and numerous fires were observed. Our airships were heavily fired at by hostile batteries. All returned safely.

"CHIEF OF THE ADMIRALTY STAFF."

Berlin, Sept. 9th (by Wireless).

"During the night before last and yesterday the docks as well as other port establishments of London and the vicinity were bombarded with explosive and incendiary bombs. The effect was very satisfactory."

"X9" Raid, September 11th (September 12th).

"A raid was attempted by Zeppelins last night on the East Coast.

"Bombs were dropped, but there were no casualties and no damage was caused."

German Version.

Berlin, Sept. 12th.

"During the night the docks of London and their environs were successfully bombarded."

"X10" Raid, September 12th (September 13th).

"The East Coast was again visited by hostile aircraft last night (Sunday night).

"Bombs were dropped, but there were no casualties, and the only damage reported is that some telegraph wires are down and some glass broken."

"X11" Raid, September 13th (September 13th).

"A hostile aeroplane visited the Kentish coast this afternoon and dropped some bombs, which resulted in one house being seriously damaged and four persons being injured.

"She was chased off by two naval aeroplanes."

Sept. 14th.

"Three further cases of injury, caused by the aeroplane which visited the Kentish coast yesterday, have been reported, making a total of seven—one man and six women injured, two of the women seriously."

"X12" Raid, September 13th (September 14th).

"A Zeppelin visited the East Coast last night, September 13th–14th. Bombs were dropped. Anti-aircraft guns, fixed and mobile, were in action.

"So far as can be ascertained there were no casualties and no damage has been done."

✱ ✱

observed, but it showed no flag. The noise of the motors was clearly audible.

Messages from Amsterdam on Tuesday stated that, according to information from the island of Ameland, only three of the five Zeppelins which sailed westward on the previous evening returned that morning. They were going in an easterly direction.

The *Daily Telegraph* correspondent at Rotterdam writing on Tuesday afternoon said: "From several parts of Holland news is to hand of the great activity of the Zeppelins during the last twenty-four hours. Late last evening no fewer than five were sighted from the northern island of Ameland, flying in a westerly direction, but so far to-day the return of only two has been reported. These passed the northern coast flying eastwards at 5.30 this morning.

"At ten o'clock last night there was another infringement of the neutrality of Holland by a German airship. This time it was in quite a new district, namely, the famous Dutch seaside resort, Scheveningen. The Zeppelin flew southwards over territorial waters, and was fired at by Dutch sentries as a warning."

The *Telegraaf* on Tuesday learnt from Hippolitushoef (Island of Wieringen) that at 6 o'clock this morning two airships flew over Wieringen in a north-easterly direction. The noise of motors was audible throughout the night. A telegram from Maassluis says that a Zeppelin was sighted yesterday evening at 10.30 off the Nieuwe Waterweg near the Hook of Holland. She was flying west.

The Royal Aero Club of the United Kingdom

OFFICIAL NOTICES TO MEMBERS

Aviators' Certificates.

THE following Aviators' Certificates have been granted:—

- 1685 Corporal Phillips Dwight Rader, R.F.C. (Central Flying School, Upavon). Sept. 8th, 1915.
 1686 Flight Sub-Lieut. Francis Joseph Lionel Bishop, R.N.A.S. (Maurice Farman Biplane, Central Flying School, Upavon). Aug. 8th, 1915.
 1687 Lieut. Sydney Herbert Bywater Harris, R.F.C. (Maurice Farman Biplane, Military School, Gosport). Aug. 18th, 1915.
 1688 Flight Sub-Lieut. Richard Eldon Bush, R.N.A.S. (Caudron Biplane, Royal Naval Flying School, Eastchurch). Aug. 20th, 1915.
 1689 Capt. Henry Bedford Cornish (Cheshire Regt.) (Maurice Farman Biplane, Military School, Farnborough). Aug. 27th, 1915.
 1690 Clacy William Patrick May (L. and P. Biplane, London and Provincial School, Hendon). Aug. 30th, 1915.
 1691 Capt. Wynnard Anthony (14th Northumberland Fusiliers) (Maurice Farman Biplane, Military School, Ruislip). Sept. 3rd, 1915.
 1692 2nd Lieut. John Wilfred Toone (Maurice Farman Biplane, Military School, Farnborough). Sept. 4th, 1915.
 1693 2nd Lieut. Guy Patrick Spence Reid (Maurice Farman Biplane, Military School, Farnborough). Sept. 4th, 1915.
 1694 2nd Lieut. George Archibald Garveys Gadd, R.F., R.H.A. (Maurice Farman Biplane, Military School, Birmingham). Sept. 4th, 1915.
 1695 Cyril Norman Seedhouse (Maurice Farman Biplane, British Flying School, Le Crotoy, France). Sept. 5th, 1915.
 1696 Lieut.-Commander Peregrine Forbes Morant Fellowes, R.N., (Maurice Farman Biplane, Royal Naval Air Station, Chingford). Sept. 5th, 1915.
 1697 Percy Charles Moynihan (L. and P. Biplane, London and Provincial School, Hendon). Sept. 5th, 1915.
 1698 Capt. Rowland Burdon (Durham Light Infantry) (Maurice Farman Biplane, Military School, Norwich). Sept. 5th, 1915.
 1699 Percy Alfred Felton Belton (Caudron Biplane, Ruffy-Baumann School, Hendon). Sept. 5th, 1915.
 1700 Lieut. Robert Hutchison Anderson (Rifle Brigade) (Maurice Farman Biplane, Military School, Birmingham). Sept. 6th, 1915.
 1701 William Barrie Young (Caudron Biplane, Ruffy-Baumann School, Hendon). Sept. 6th, 1915.
 1702 2nd Lieut. Geoffrey Joseph Lightbourn Welsford (Middlesex Regt.) (L. and P. Biplane, London and Provincial School, Hendon). Sept. 6th, 1915.
 1703 Vaudrey Adolph Albrecht (Maurice Farman Biplane, Military School, Birmingham). Sept. 7th, 1915.
 1704 Flight Sub-Lieut. Charles Fancourt Brandon Penley, R.N.A.S. (Grahame-White Biplane, Grahame-White School, Hendon). Sept. 7th, 1915.

- 1705 Flight Sub-Lieut. Cecil Arthur Rea, R.N.A.S. (Maurice Farman Biplane, Royal Naval Air Station, Chingford). Sept. 7th, 1915.
 1706 Edmund William Furse (Maurice Farman Biplane, British Flying School, Le Crotoy, France). Sept. 8th, 1915.
 1707 Flight Sub-Lieut. Ernest Leonard Ford, R.N.A.S. (Grahame-White Biplane, Grahame-White School, Hendon). Sept. 8th, 1915.
 1708 Flight Sub-Lieut. Howard Vincent Reid, R.N.A.S. (Maurice Farman Biplane, Royal Naval Air Station, Chingford). Sept. 8th, 1915.
 1709 Capt. Frank Devereux Berridge (6th Dorset Regt.) (Maurice Farman Biplane, Military School, Birmingham). Sept. 8th, 1915.
 1710 Eric James Tyson (Maurice Farman Biplane, Military School, Birmingham). Sept. 9th, 1915.

AMERICAN CERTIFICATES.

- 31 (Hydro-aeroplane).—Philip S. Fisher (Thomas Biplane, Ithaca, New York). Aug. 11th, 1915.
 32 (Hydro-aeroplane).—George R. Hodgson (Thomas Biplane, Ithaca, New York). Aug. 11th, 1915.

Extension of Hours of Opening the Club House.

The Club is now open from 9 a.m. to 10.30 p.m. each day, including Sunday.

THE FLYING SERVICES FUND

administered by

THE ROYAL AERO CLUB.

THE Flying Services Fund has been instituted by the Royal Aero Club for the benefit of officers and men of the Royal Naval Air Service and the Royal Flying Corps who are incapacitated on active service, and for the widows and dependants of those who are killed.

The Fund is intended for the benefit of all ranks, but especially for petty officers, non-commissioned officers and men.

Forms of application for assistance can be obtained from the Royal Aero Club, 166, Piccadilly, London, W.

Subscriptions.

| | £ | s. | d. |
|--|-------|----|----|
| Total subscriptions received to Sept. 8th, 1915... | 9,574 | 15 | 8 |
| Miss Marjorie Baynard | 0 | 5 | 1 |
| Employés of Ruston, Proctor, and Co., Ltd. | | | |
| (Third contribution) | 1 | 0 | 0 |

Total, September 15th, 1915 ... 9,576 0 9
 166, Piccadilly, W. B. STEVENSON, Assistant Secretary.

FROM THE BRITISH FLYING GROUNDS.

London Aerodrome, Collindale Avenue, Hendon.

Grahame-White School.—Straights with instructor last week: Probationary Flight Sub-Lieuts. Biscoe, Gammon, Man, Sadler, Corry, Hadow and Till. Landing practice: Probationary Flight Sub-Lieuts. Cross and Till. Circuits alone: Probationary Flight Sub-Lieuts. Ford and Roach-Pierson. Eights: Probationary Flight Sub-Lieuts. Ford and Penley. Tickets during week: Probationary Flight Sub-Lieuts. Ford and Penley. Very good tickets. Instructors during week: Messrs. Manton, Russell and Winter.

Beatty School.—The following pupils were out during the week:—With instructors on Beatty-Wright machines: Messrs. Arbon (21 mins.), Bond (5), Crossman (20),

FitzHerbert (15), Fox (20), Hoskier (10), Morgan (45), Onley (12), Ross (15), Sampson (15), Smith (10), Theo (20), Thompson (15), and Wilmet (23). On Caudron machines: Messrs. Begg (20 mins.), Brown (10), Byrne (20), Collier (30), Cowper (30), Gayner (60), Grant-Suttie (15), Greenhill (20), Hodgson (20), Hoskins (30), L. F. Jones (30), Lashmar (60), Mellings (20), Moxon (15), Nash (10), Owen (20), Rimington (70), Richard (10), Symington (10), Tremlett (10), Whincup (10), Patterson (20), Murdoch (5), Duffus (30) and Brynildsen (20).

Certificates were taken during the week by Messrs. R. J. E. Cadogan and Roy D. Sampson.

The instructors were Messrs. G. W. Beatty, W. Rochekelly, C. B. Prodder, R. Kenworthy, A. E. Mitchell, and

G. Virgilio, the machines in use being Beatty-Wright propeller biplanes and Caudron tractor biplanes.

Exhibition flights were given on Thursday by Messrs. Roche-Kelly and Kenworthy and on Sunday by Messrs. Roche-Kelly, Prodger and Kenworthy.

Hall School.—The following pupils applied for and successfully obtained their Royal Aero Club Certificates: Arthur Walker Huggan and Russell. Both banking well on the turns and landing with faultless *vol plané*.

Messrs. Hatchman, Wenner, and Littlewood are ready to go for their tickets, whilst the majority of the pupils at the school are making excellent progress.

With Instructor H. Stevens: Messrs. Huggan, Russell, and Hatchman, all practising circuits, figure eights, and landing on the mark. With Instructor C. M. Hill: Messrs. Watson, Littlewood, Wenner, Bayley, Drew, Cook, and Bangs, all practising half-circuits or circuits and *vol plané* landings. With Instructor C. Bell: Mr. Dresser, Baron Ackroyd, Lieut. Dalley, Messrs. Stirling, Hall, Broad, Brandon, Hooker, Sepulchre, Bond, Camberbirch, Butterworth, Wilkins, and Ornsby, all practising rolling or solo straight flights.

Mr. J. L. Hall and Instructor Stevens were out several times during the week giving exhibition flights on Tractors Nos. 4 and 6.

Machines in use: Hall tractor (Government type) biplanes.

London and Provincial Aviation Co.—Pupils doing rolling last week: Messrs. Knowles, Lochett, Lewis, Hordern, and Dalrymple. Straights: Messrs. Grimwade, Frost, Rochford, Blackburne - Maze, Woodley, and Woolley. Circuits and eights: Messrs. Rogers, Jamieson,

Sargood, and Franklin. Extra practice: Mr. J. A. Turner.

Certificates taken: Lieut. G. Welsford and Mr. P. Moynihan both took their *brevets* this week, making good, steady flights.

Instructors: Messrs. M. G. Smiles, W. T. Warren, G. Irwing, and C. M. Jacques.

Midland Flying School, Birmingham.

ALTHOUGH the weather was fine during last week, the dense mist morning and evening prevented a lot of school work. The following pupils were out with the instructor (S. Summerfield) during the week: Messrs. C. Mento, J. Munhon, C. Morley and H. Yam.

During a flight with No. 1 machine a slight accident occurred through the breaking of a piston, but, thanks to the many energetic pupils, a new one was quickly fitted, causing no delay whatever.

Northern Aircraft Co., Ltd.

The Seaplane School, Windermere.—Work last week with instructors: Ingham (11 mins.), Inglis (5), Leigh (9), Lawton (14), Macaskie (7), Part (8), Ridgway (7), Slow (18), and Yates (5). With instructor as passenger: Lawton (20 mins.), Macintyre (28), Part (10), Reid (13), Ridgway (18), Robertson (22), Robinson (6), and Yates (11). Figures of eights or circuits alone: Laidler (12 mins.), Macaskie (66), Reid (29), and Slingsby (30).

Instructors: W. Rowland Ding and J. Lankester Parker. Machines: N.A.C. Pusher Biplane and 50 Gnome.

Macaskie passed test B successfully.

Several passengers carried, including Mr. H. D. Pearsall from the British Association Meetings.



Copyright, F. N. Birkett, from the F.N.B. Series of Aviators.

A sextette of civilians who have recently obtained their Royal Aero Club certificates at the Hendon Aerodrome Flying Schools.—1. Messrs. J. W. Gordon, Hall School. 2. G. Irwing, London and Provincial School. 3. J. Bernard Fitzsimons, Ruffy-Baumann School. 4. Thomas Corby Wilson, jun., Ruffy-Baumann School. 5. C. M. Jacques (Belgian subject), L. and P. School. 6. Ami Baumann (cousin of Edouard Baumann), Ruffy-Baumann School.

ARMCHAIR REFLECTIONS.

By THE "DREAMER."

WRITING after more than a year of war, I have a feeling of great pride in our air services. They have done magnificently.

A couple of years ago the cry of "Wake up, England," was in the air. As an Englishman, it appears to me to be characteristic of us that we shout for things to be done and expect others to do them. Just when or how the waking up was going to start, or along what lines we should travel when we had awakened from our slumbers, the shouters did not seem to have the remotest idea.

I tried by judicious enquiry and a little coaxing to get the opinion of many in the world of aviation as to what really ought to be done, and the result was highly entertaining. Honestly, they had no idea, though they were all quite sure we ought to wake up. The one point on which all agreed was the very obvious one that whatever machines we built, we wanted more of them.

It is certain that on the outbreak of war we had not nearly enough aeroplanes, but we must not forget that our art was in its infancy, that our camps were greatly divided in opinion as to the best machine, that we were meeting with and solving great and new problems every day, and that now, after a year of service, it is doubtful whether there is such a thing as a BEST machine, in view of the different services required of them.

In these circumstances it would have been silly to build hundreds of any one type. When the war caught us up in its whirlwind, we built, and built quickly those machines which were the best of our known types, and I think we have had little cause to complain of their performances. A year of war has not induced us to alter in any material matter our types of a year ago. Our machines are quite good, what of the men?

Before the war we were training men in and for the R.F.C., including the Navy side of the work—since developed into the R.N.A.S. Of these I have nothing to say except to congratulate them on the way they have upheld the youngest arm of the services, and brought it into line with regard to valiant deeds, honour, and glory, in this their first war, with the most honourable of His Majesty's forces. With these men I wish to include those who were civilian pilots before the war, and who rushed to the colours almost to a man. We do not hear much of them, these men who used to stunt around pylons. Great deeds of personal bravery are happening every day, go to the credit of the service, and are but duty done. It is only on very rare occasions, when the deed is, for some reason, outstanding, and it is impossible for the hero to escape the limelight, that the name is passed on to the public. But we get to hear of them through the little bird that whispers, and when the war is over, and we are free to write, we shall have many great doings waiting all ready for giving to the world. When I look at that list of names which hangs in the Royal Aero Club, with a tiny Union Jack pinned against the name of every member on active service, I feel almost inclined to be sorry for Germany.

Then there are those who have entered aviation since the commencement of war, those who heard the cry of "Wake up, England," from afar, from the woods of Canada, from the grazing grounds of far Australia, from the vales and uplands of New Zealand, and not knowing how to fly, came over to learn. Mark the words, came over many thousands of miles of danger-infested waters to LEARN to do something which they knew the Mother Country stood in need of. How well they progressed

and the mettle they are made of has been proven—merely to take one instance—by the never-to-be-forgotten skill and daring of Lieutenant Warneford, V.C., and before this business is through will be proven by others—is being proven by others.

And yet we were asleep, you know. It is of no use trying to dodge the fact; we were asleep, lulled to sleep by sheer inactivity.

It is my sincere conviction that the gigantic struggle in which we are now engaged will prove the very best possible thing that could have happened for Britons. A few more decades of peace, a few more years of living as we lived, and our mental faculties intoxicated for a period into super-self-aggrandisement of worth and power would have reached, metaphorically, that semi-lethargic state where we would sit down and roll our eyes to heaven while the Empire toppled about our ears. And our latest breath would have been given to call upon somebody to wake up.

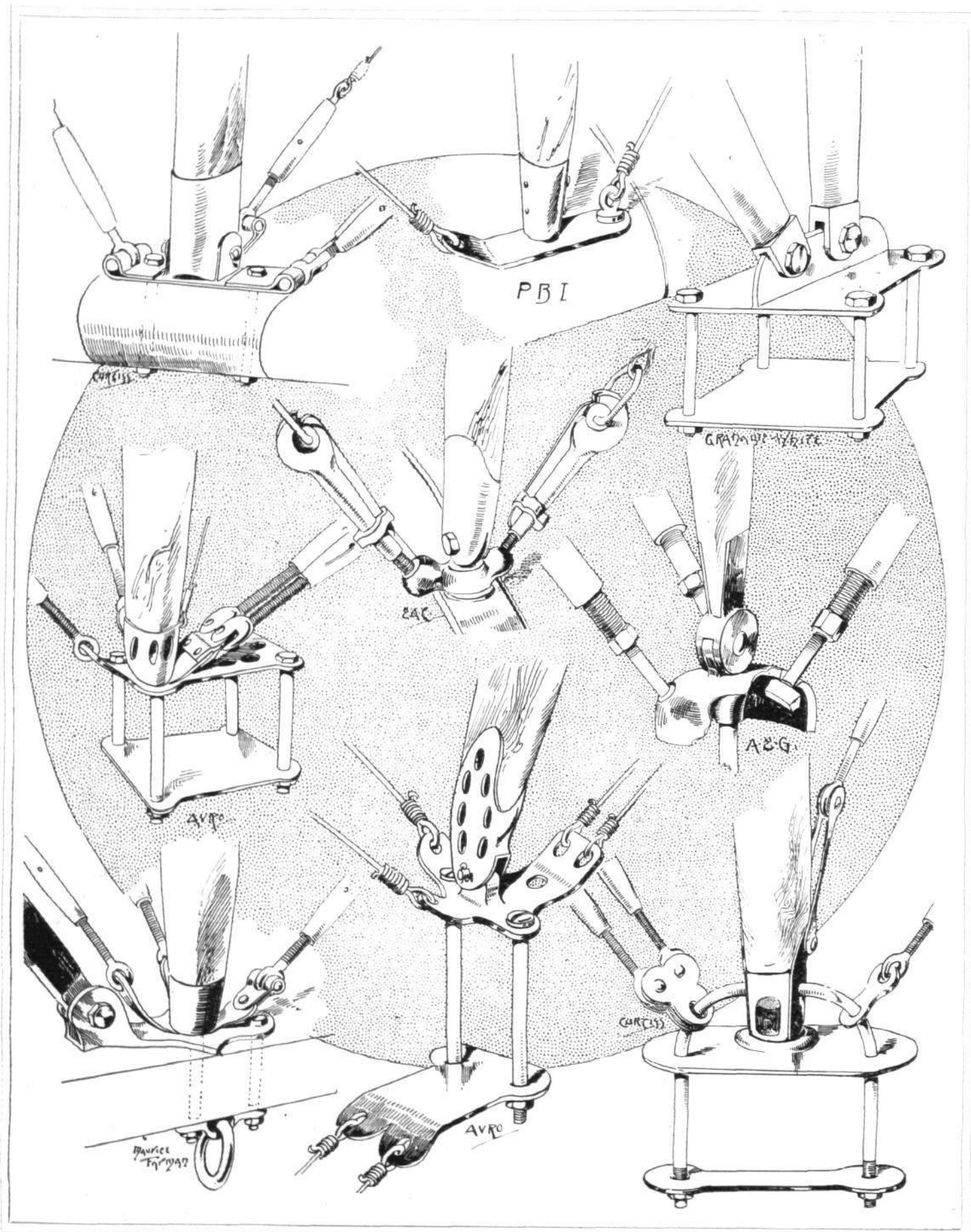
The Briton's independent spirit is proverbial, and admirable up to a point, and the point is just where we forget that it is not only as individuals that we must seek to live, but also as a nation. We have been so busy conducting the process of "getting on" individually, which, being interpreted, means getting, by as honest means as possible, as much as possible of this world's goods, from as many of our neighbours as possible, that we have overlooked the fact that whether rich or poor we are all as necessary to the safeguarding of our nation.

But we are waking up, and with the awakening comes the realisation of the necessary and the unnecessary. We are rapidly making up the shortage in the necessary, and are eliminating, I hope for all time, the unnecessary. Time was, and not so very long ago, when to swagger down Piccadilly in violet socks and a monocle, one was thought a "dooce of a fine chap," particularly if one had the exactly correct intonation in saying "Eh, what?" To-day we look on the like with something more than pity, having more pride in the man in khaki and hob-nailed boots. One is a man, the other is, I don't quite know what—a "hodmadod." To-day we have no use for "hodmadods" and "mugwumps"; we want men, and after the war we shall want men. I do not think the fashion in men is going to change, we are becoming awake.

Here is an extract from a letter which I have this week received from the firing-line, and which is interesting in view of what I have written above. It is from one of my fellow-workers on the staff of "FLIGHT" and her sister journal the *Auto.*, of which, I am proud to say, over 45 per cent. have joined the colours:—

"I had a letter from X. some time ago; he seems all right. I guess he had a — of a rough time of it, but he's got the pluck, though he is not so big for smash-ups like Neuve Chapelle. He's the sort of boy I'd have close beside me if I ever were in a tight corner. Y., if he has arrived in the firing line, regards life in a somewhat different light to what he used to in the old days. Facing death is a wonderful thing to tone down a fanciful swanky chap's ideas. One realises life and things with a clarity of thought practically impossible in ordinary humdrum existence. One realises with an appalling suddenness, too, how trifling are the things one worries over in peace time. I am inclined to think that after the war England will profit greatly by the level-headedness of the men who have realised life and its possibilities in that hard school, the fire-trench."

CONSTRUCTIONAL DETAILS.—II.



Various methods of attaching the inter-plane struts to the wing spars.

CONSTRUCTIONAL DETAILS.

CONTINUING this week the series of comparative sketches commenced in our last issue with another full page (opposite page) of inter-plane strut sockets with their fittings. By request we have attached in each case the name of the constructor of each individual design, and in this connection we now give the names of the makers of the examples which were published last week on page 684. They are, starting in the top left hand corner and

reading from left to right: Handley Page, Coanda-Bristol, H. Farman, D.F.W., British Caudron, Breguet, Albatros, Hamble River, Grahame-White.

An examination of our page of illustrations this week will show that not all the fittings are of the latest type, but they have been included in order to show, as it were, the development and progress made in the design of this particular fitting.



FLYING AT HENDON.

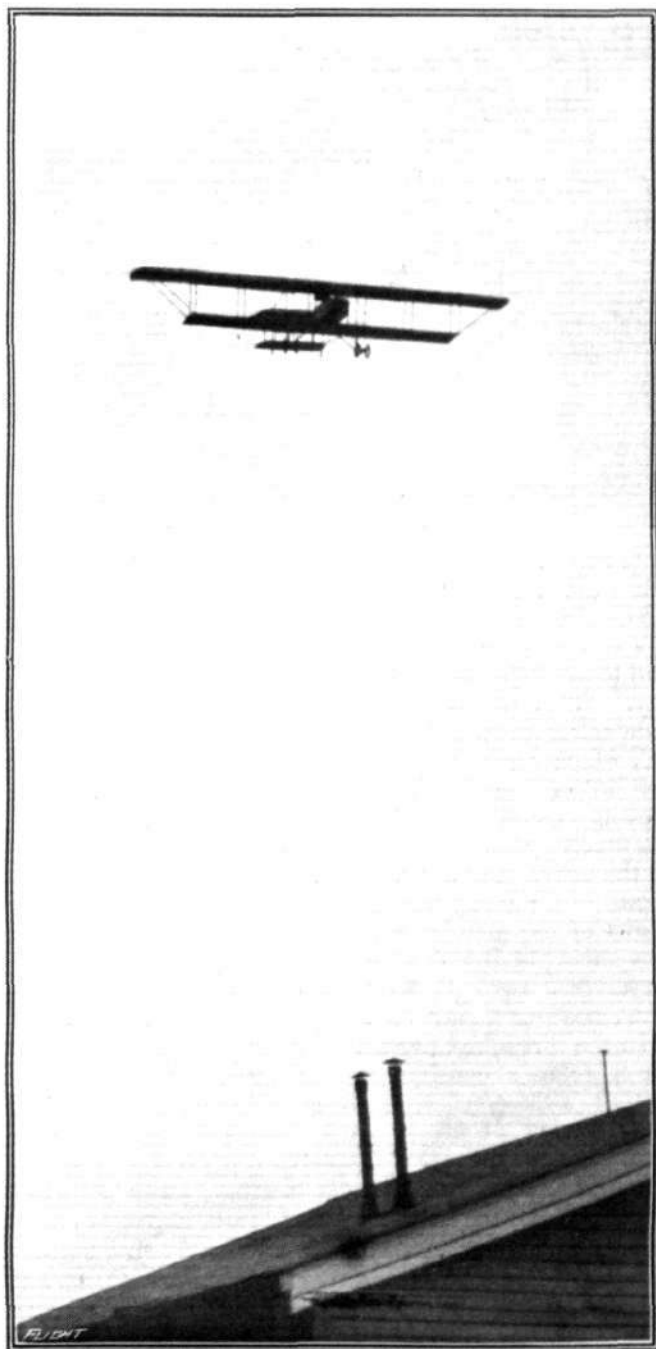
EITHER Hendon over-flew itself on the Sunday of the previous week-end, or else the wind *really* was too strong, because last Saturday afternoon passed practically without any flying at all. About halfway through the afternoon there were expectations when a Maurice Farman was brought out, but it was not to be, for nothing further happened than the running of the engine for a few moments.

Later on, at about 5 o'clock, J. L. Hall came along with his 45 h.p. Caudron, but after flying across the ground he came down again, and then had another try, with the same result, so he decided to remain on "terra-cotta" for the time being. In the meanwhile M. Osipenko was putting up a similar performance on the 50 h.p. G.W. school 'bus, but having a few extra "horses" at his disposal he was more successful than Hall, and eventually managed to put up a couple of circuits.

In the evening, things livened up just a little when one or two of the schools got going. Although there was little enough doing "outside," there was plenty going on inside the various hangars. In the Hall hangar we *think* we saw an instructor instructing three pupils, seated with him round a table, something or other in which bits of card formed an important part. Instruction in "banking," perhaps? In the "Dep." shed a new edition of "Old Moore's Almanac" was rapidly nearing completion. J. H. Moore, with the assistance of one of the James Bros.—which one we cannot say, for unless they are both together it is impossible to tell which is the other one!—was busy putting the finishing touches to the 50-55 h.p. Anzani engine which he has installed in his L. and P. biplane. Fitted with this engine this 'bus should put up a performance even better than hitherto.

On the average, Sunday at Hendon is better than other days, and last Sunday was no exception. Although there was not so much flying as on the previous Sunday, there was enough to render it difficult to keep account of each flight made. Marcus D. Manton and J. S. B. Winter on 50 h.p. G.-W. school 'buses and M. Osipenko on the 100 h.p. G.-W. five-seater were the first away, R. Kenworthy on the 45 h.p. Beatty-Wright and W. Roche-Kelly on the 50 h.p. Beatty-Wright following shortly after. These five pilots between them accounted for about twenty flights, with and without passengers, during the rest of the afternoon. Other pilots out were C. B. Prodger on the 45 h.p. Beatty-Wright, J. L. Hall on his 45 h.p. Caudron, H. F. Stevens on the same machine, E. Baumann on the 60 h.p. Ruffy-Baumann, Ami Baumann on a similar machine, and G. Irwing and M. G. Smiles, with a passenger, on 45 h.p. L. and P. biplanes. On several occasions six machines were to be seen in the air together.

In the evening there was some school work of the usual order and one or two tickets were qualified for.



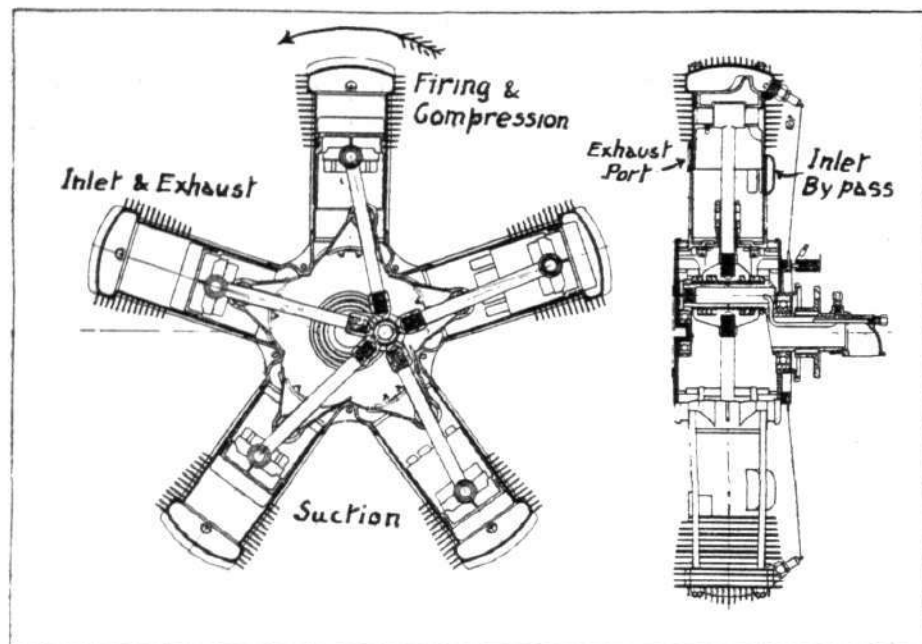
Mr. Osipenko on the Grahame-White 5-seater passenger-carrying 'bus at Hendon.

SOME AMERICAN AERO ENGINES.

THE FREDICKSON TWO-STROKE (ROTARY).

PARTICULAR interest attaches to the Fredickson aero motor, not only on account of its being both a two-stroke and a rotary engine, but because of the extremely ingenious manner in which the cycle of operations is carried out. The primary feature of the Fredickson engine, of which there are three models, a three-cylinder, five-cylinder and ten-cylinder, is that instead of compressing the explosive mixture in the crankcase, as in

also by centrifugal force. When the piston is at the bottom of its stroke the port connecting the crankcase with the compression chamber is on the point of opening. As the piston moves upwards the connecting rod swings over towards the wall, and in so doing slides the valve, opening the port wider and wider, and then, as the connecting rod swings back to dead centre, gradually closing it until completely closed by the time the piston reaches the top of its stroke. This opening and closing of the port admits into the compression chamber the mixture of petrol and air, which is drawn in from the crankcase by the suction of the rising piston, and then imprisons it between the piston and the crankcase. Here the mixture is compressed by the descending piston, which, when it reaches the end of its stroke, uncovers a by-pass leading from the compression chamber to the business end of the cylinder, thus admitting the mixture thereto, ready for explosion. As with the ordinary two-stroke engine, the spent gases of the previous explosion pass out through exhaust ports uncovered by the piston as the fresh mixture enters. The construction and movement of the valves, &c., are shown in the accompanying illustrations. The mixture in the crankcase is always uniform, and each cylinder receives the same quality and volume of mixture, as the valve opening is the same in each case. The cylinders and pistons are of the usual two-

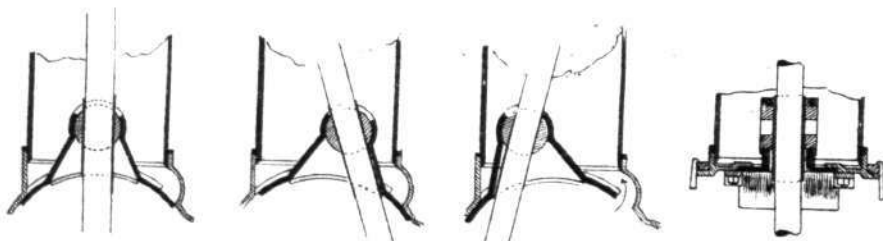


THE FREDICKSON TWO-STROKE ROTARY MOTOR.—Sectional drawing.

most two-stroke motors, the lower portion of the cylinder, below the piston, is "partitioned off" for this purpose, and the crankcase is free of any compression, merely serving as a reservoir for the mixture of petrol and air which is lead therein through the hollow crankshaft in the usual way. This partition takes the form of an oscillating slide valve, operated by the connecting rod, which opens and closes the lower portion of the cylinder, or the compression chamber, to the crankcase at the precise moments. The attachment of the connecting rod to the valve is by means of a rocking trunnion, which both allows of the angular and reciprocating movement of the connecting rod and preserves a gas-tight joint between the crankcase and the combustion chamber.

In the three- and five-cylinder models the crankcase consists of a cylindrical casting with steel end plates held together by five bolts having a nut at each end and passing right through the crankcase. The valve seatings—which slightly project from the crankcase—and are above, or outside, the valves. The latter are held in position against their seatings by guide plates below them, and

stroke type, the former of cast iron with cooling fins, and the latter having a baffle plate opposite the inlet opening. The cylinders are each held down to the crankcase by four through-bolts which pass through lugs cast in the cylinder head, and are anchored to lugs on the crankcase bolts. Lubrication is effected by mixing the oil with the



THE FREDICKSON TWO-STROKE ROTARY MOTOR.—Diagrams showing the action of the valve.

petrol and by a gear driven oiler, which forces oil on to the crankshaft, connecting rod big ends, &c. Ignition is by a single distributor high tension magneto, the high tension current being led by a single cable to a circular distributor mounted on the crankcase. The distributor consists of a fibre ring with a brass segment for each cylinder, from which the ignition wires are taken to the plugs.

New French Height Record.

INFORMATION from Paris states that on the 8th inst. Audemars beat the French altitude record, his barograph showing that he had reached a height of 19,800 ft. The previous record was 18,630

to the credit of Legagneux. Audemars started from Issy, and descended an hour later at Villacoublay. He was prevented from going higher in order to attempt to beat the world's record of 26,000 ft. made by Oelerich in July of last year.

EDDIES.

IF there is one Hun to whom the British nation in general, and aviation in particular, should be grateful it is Germany's "grand old man," the aged Count Zeppelin. By the recent raids on the eastern counties and London districts, the products of his creative brain have excited an interest in matters aeronautical, which it would have taken writers in the technical and lay Press months, or perhaps even years, to arouse. As it is, the man in the street has for once been disturbed in his complacent contemplation of the paving stones under his feet, and forced to turn his eyes skyward in wonderment at the new fangled instrument of war, of which he had heard and read so much, but which was to him hardly more than a name. That the interest in aircraft is now shared by practically the whole of the general public is patent to everyone, as during the last few days the favourite topic of conversation has probably been that of air raids. It is well that such interest has been aroused, and the only pity is that it has had to be done at the cost of the lives of innocent women and children. Apart from the last fact, one can heartily agree with the German official statement that the raids were entirely satisfactory. They had brought home the fact fairly vividly to a number of people who did not apparently realise it, that this country is really at war, and that the whole thing is not, as some people seemed to think, "only a rumour."

x x x

If one could, while the raid was on, forget for the moment that for each ominous "boom" some innocent civilian was being murdered, the visits were not devoid of amusing incidents. One of the most frequent assertions that one came across during the days following the raids was to the effect that the Zep. passed directly over each and every narrator's house. Judging by the number of houses passed over in this manner, there must have been several thousands of Zeppelins. One man I spoke to, or rather spoke to me, as I was unable to get a word in edgeways, was most precise in his description of the course of the Zep. Upon my expression of doubt, he at last went so far as to concede that possibly the thing did not after all pass over *his* house, but at any rate, if it didn't, it at least passed over the house next door. There has been a good deal of the "Anyway, there was our cat and another" smack to *most* of the stories floating around.

That the general public does not, in spite of its newly awakened interest in aviation, yet begin to have a working knowledge of the various types of aircraft is also evident from the bits of conversation that one is constantly stumbling across. Thus one day on the top of my motor car, which for the time being was in the hands of the London General Omnibus Company, I heard one man telling a fellow rider about the reception given the nocturnal prowler. "The German," he said, "stood there staggering, absolutely exhausted, not knowing which way to turn, with our chaps letting go at him all round. It was clear that he was dead tired after his long flight from Germany, and the hot reception he was given was almost too much for him. He stood there quite still for a few minutes trying to pull himself together, and then made a dash for it." The idea of one man bringing a Zep. over here, and doing all the navigation, engineering, and bomb-dropping himself, is extremely humorous.

x x x

In the district where I happened to be at the time of the raid the population appeared to look on the affair as a sort of "free entertainment" which should not under any circumstances be missed. Exceptional cases there were, to be sure, of people getting nervy, but the general attitude was one of excitement rather than fright.

x x x

When the Hendon Aerodrome first came into being—it already seems a long time ago—it would have been difficult to find anyone who had enough faith in the future of aviation to venture a prediction to the effect that some day that large tract of land would become too small to afford landing ground for the numbers of machines having their home there. Yet to-day this is to a certain extent the case. So greatly has aviation expanded that with the number of schools in operation, each possessing a fleet of machines, the ground, in spite of its several hundred acres, is none too large, especially as the pupils in the earlier stage of their career have their hands pretty full, handling their machines, without having to trouble about avoiding collisions. Realising this and the fact that a goodly portion of a pupil's training time is taken up by doing "straights," the London and Provincial School have secured a tract of land just outside and



A short time ago reference was made in "Eddies" to the American height records established by the American pilot, Raymond V. Morris, on a Curtiss model R 2 tractor biplane. The accompanying portrait of the pilot was taken by one of his passengers at an altitude of 8,000 ft.

immediately adjoining the aerodrome. This new L. and P. "Annexe" affords an excellent stretch several hundred yards in length and unobstructed by any obstacles. When the day's work commences one of the instructors hops over the fence on one of the 'buses used for school work, and the beginners can start work without having to bother about getting in the way of other machines, and in this manner a considerable amount of time is saved every day. The acquisition of the L. and P. "baby" aerodrome should therefore mean a general reduction in the time taken for turning out a pilot.

x x x

While chatting to Mann and Grimmer at Hendon the other day, the conversation naturally turned to the somewhat prolonged period during which the "Mann" biplane has been confined to its tent. The reason for this, it transpired, is that it has not been possible to obtain the services of a pilot who lives near the aerodrome, and who would be always available. Mr. S. Pickles, who has flown the machine, is now prevented by his contract with another firm from flying the "Mann," and hence someone else has to be found. If any reader should know of a pilot whose services are available, and will communicate with me, I shall be pleased to see that he is introduced to the firm in question.

x x x

It is quite refreshing for once to come across a German piece of writing on war topics in which one finds no trace of the "Gott strafe England" element, even if the writing is only on the side of a railway truck, as in the accompanying photograph. The text of the verses chalked on the door of the truck is as follows: "Wir sind die Flieger, Wir sind die Krieger, Die Kämpfen im Bereich der Luft. Wir flinken Flieger, Wir bleiben Sieger, Wenn's auch von unten höllisch pufft. Und ob auch ware Wie Sand am Meere Der Feinde Zahl, Wir tragen's leicht. Wir machen Ehre Dem Deutschen Heere So lang Benzin und Atem reicht."

⊗ ⊗ ⊗ ⊗

LIGHTER THAN AIR.

Meinself and Gott.

THE KAISER'S PRAYER, OR THE LATEST ULTIMATUM.

Gott, Gott, dear Gott, attention please!

Your Bartner Vilhelm's here,

Und has a vord or two to say

Into your Brivate ear.

So durn away all udders now

Und listen well to me,

For vat I say concerns Us much,

Meinself and Shermamy.

You know, dear Gott, I vas your friendt,

Und from my hour of birth

I quietly let You rule the Heffen

Vile I ruled o'er de earth;

Und ven I told mein soldiers bold

Of bygone battle days,

I gladly shplit the Glory, Gott,

Und giff You half the praise.

In every vay I tried to prove

Mein heart to You vas true,

Und only claimed my honest share

In great deeds vat *We* do.

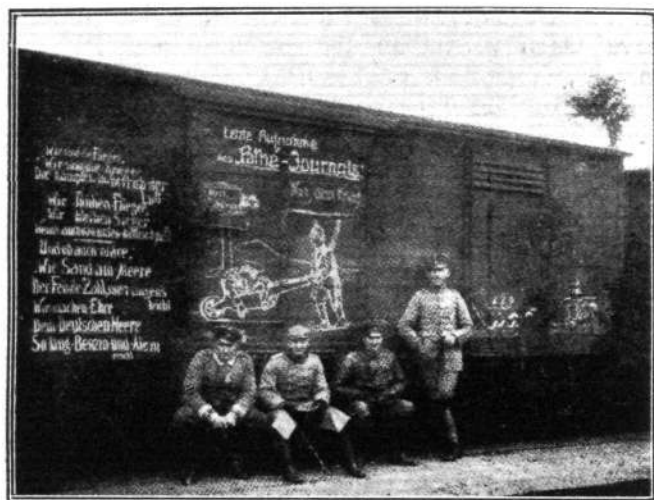
You could not haf a better friendt

In sky, or land, or sea

Dan Kaiser Vilhelm Number Two,

De Lord of Shermamy.

I have tried to get my colleague the "Dreamer," who in his brighter moments is not a bad hand at poeting, to put the translation into verse, but as he has failed to come to my aid, I am reduced to the only alternative of translating, so far as my limited knowledge of the "Kultur" language allows, verbatim: "We are the pilots, we are the warriors, who fight in the kingdom of



GERMAN "FLIEGER" HUMOUR.—Aeroplane transport on the eastern frontier.

the air. We smart pilots, we shall be victorious in spite of the hellish puffs below. And even if the number of our enemies were as sand on the beach we do not trouble. We will do the German Army honour so long as we are not short of petrol and breath."

x x x

I do not know whether or not there is any possibility of their running out of petrol, but from what little I do know of the German language I should think it very probable that they would be short of breath if they recite many of their war poems. "ÆOLUS."

So vat I say, dear Gott, is dis—

Dat ve should still be friendts,

Und you should help to send mein foes

To meet their bitter end;

So four and twenty hours I gif

To make the Allies run,

Und put me safe into my blace—

De middle of the sun.

Per Mr. N. M. Cohen, Zermatt, from a newspaper in Batavia.

An Aufu' Job.

THE Government official had been telling a simple old Scotch farmer what he must do in the case of a German invasion on the east coast of Scotland.

"An' hae I reely tae dae this wi' a' ma beesties if the Germans come?" asked the old fellow at the finish.

The official informed him that such was the law. "All live stock of every description must be branded and driven inland."

"Weel, I'm thinking I'll hae an awfu' job wi' ma bees!"

Fooling more than the Enemy.

RAIN was falling steadily as the weary cyclist plodded on through the mud. At last he spied a figure walking toward him through the gloom.

Gladly he sprang off his machine and asked the countryman:

"How far off is the village of Poppleton?"

"Just ten miles the other way, sir," was the reply.

"The other way!" exclaimed the cyclist. "But the last signpost I passed said it was in this direction."

"Ah," said the villager, with a knowing grin, "but, ye see, we turned that there post round, so as to fog those 'ere Zeppylings!"

Stork Strafing.

MISTAKING the birds for aeroplanes, the German artillery in Alsace furiously bombarded a flock of storks. Or is it possible the Teutons thought the birds might be carrying—ahem—babies?—*London Opinion.*

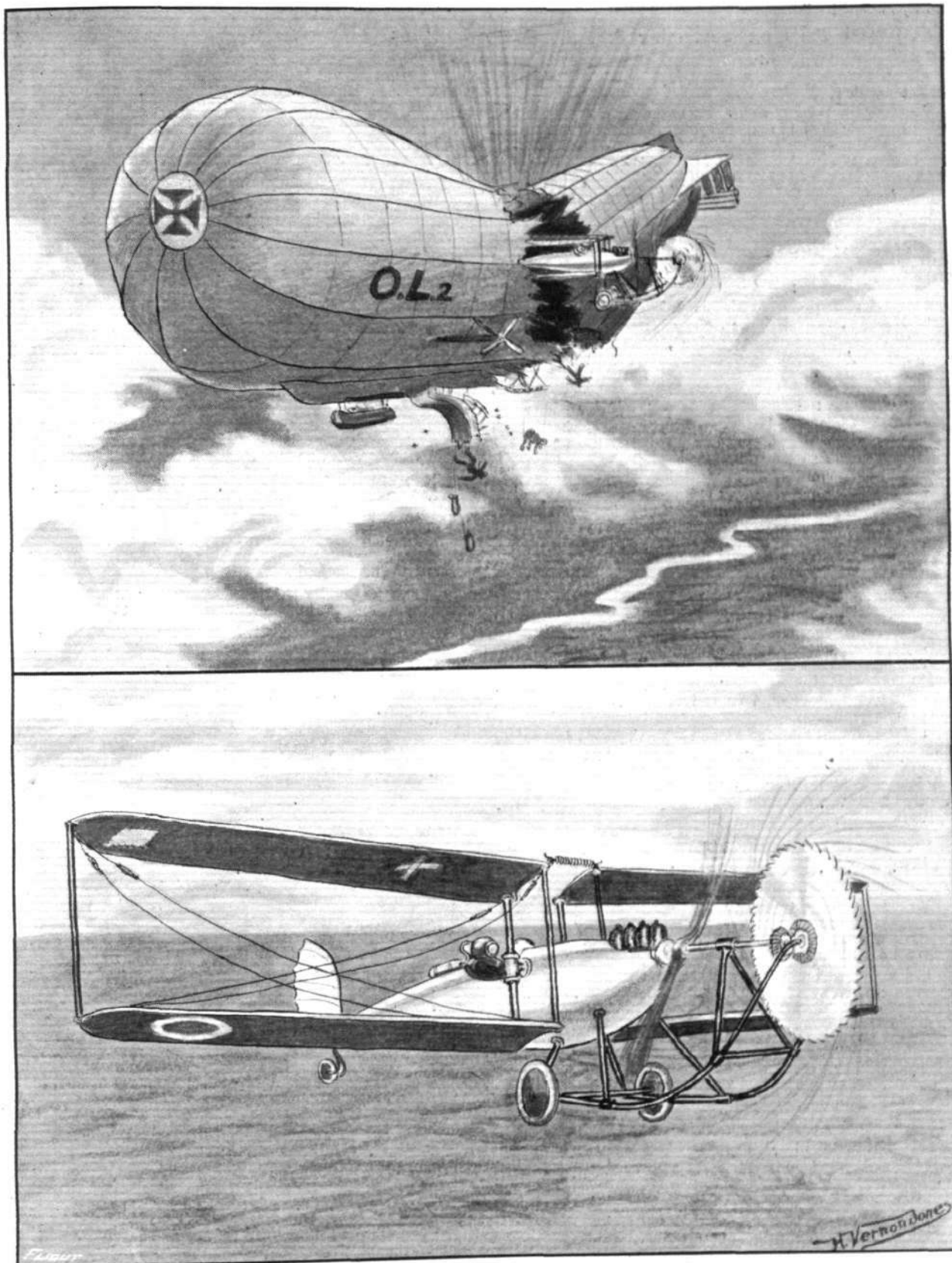
An Echo of the Air Raid.

SCENE: Night in the Eastern Counties. A Zeppelin, bril-

liantly illuminated by search-lights and festooned with shrapnel, is observed approaching. A National Guard (with gun) enters O.P. followed by his wife.

National Guard, sighting for the Zep.: "I really believe I could pot the beggar."

His wife (alarmed): "Oh! Charles, please don't irritate it."—*Financial Times.*



ZEP.—"STRAFING" DEVICES. By "FLIGHT'S" Tame Inventor.
No. 1.—The aerial-saw (with folding wings).

AIRCRAFT AND THE WAR.

THE following Exchange message from Amsterdam was received on September 8th :—

"Reports from the German frontier state that the air raid on Saarbrücken had terrible results. The military railway was blown up, the number of persons killed being, it is said, 75, the majority of whom were soldiers. The greatest secrecy has been ordered by the military authorities."

Writing from Paris on September 8th, the *Times* Paris correspondent said :—

"The longest range gun of all—the aeroplane—is now, thanks to the perfect weather, participating in the intense bombardment proceeding along the Western front. These aeroplane bombardments in no wise resemble the futile expeditions of the Germans over Paris, but really mean that the point attacked has to suffer a bombardment just as severe as though it were under fire of heavy artillery, the bombs dropped being exactly of the same calibre as those used by heavy guns."

Regarding the recent bombardment by the British Fleet of the Zeebrugge district, the *Telegraaf*, on September 9th, stated that according to information received from Bruges :—

"The central airship shed, which contained two dirigibles, was also badly damaged, as well as the Solvay factory, though nothing is known as to the amount of damage done, as no civilian is allowed to enter the works."

Writing from Paris on September 9th the *Times* Paris correspondent said :—

"The prevalent clear, calm weather is enabling the French aeroplanes to effect a useful bombardment of the German railheads at various parts of the front. The utility of these aerial raids is well shown in an account in the *Liberté* this evening of the recent Allied raid with 60 aeroplanes upon the Forest of Houlthulst, which is situated about half-way between Dixmude and Ypres. The forest is practically sheltered from the effects of the Allied artillery, and it has been converted into a regular garrison district, with barracks full of troops and munitions depôts, and the whole camp illuminated with electric light."

"Thanks to excellent air photographs, the situation of the main military buildings was located exactly, and at 10 p.m. the 60 French, Belgian, and British aeroplanes started out in clear moonlight. Immediately the aeroplanes appeared there was great excitement in the camp, all lights were extinguished, and anti-aircraft guns came into action, but the airmen, greatly assisted by the moonlight, dropped over four tons of high explosives and incendiary bombs upon the camp's depôts."

"Some of the aircraft returned to refill with shells no fewer than three times in the course of the night. By the light of the fires started the airmen saw groups of soldiers fleeing in great disorder in the panic caused by the continual explosions in the ammunition depôts. By 11.30 p.m. the entire forest and the buildings it contained were in flames."

In a message to the *Daily Telegraph* from Milan on the 9th inst., Mr. A. Beaumont said :—

"An Austrian seaplane, as mentioned in the official bulletin, was captured on the Adriatic with its two officers last Monday, after the attempted bombardment of Venice. Interesting details have now been received of this raid. Two Austrian seaplanes started on Sunday from Pola at four o'clock in the afternoon, flying very high, and, treacherously flaunting the Italian colours, headed for Venice. They were perceived, however, and the trick discovered, and were immediately shelled by a coast battery. Only eight shots had been fired when one of them was disabled by shrapnel, which damaged the radiator, and the machine descended into the sea some ten miles off the mouth of the Brenta. Eight seaplanes had meanwhile started from Venice to give chase, and one of these, piloted by Capt. Bologna, ran out of petrol, and alighted not far from the disabled Austrian seaplane."

"Both machines remained within sight of each other all night, and towards morning an Austrian seaplane from Pola, which came in search of their lost comrade, appeared, and, seeing the Italian machine, attempted to destroy it by dropping bombs. Captain Bologna had a thrilling experience, manœuvring his seaplane on the water with what essence remained in his tank, and trying to escape the bombs which exploded close to him, but without injuring him. Soon afterwards an Italian torpedo-boat appeared, and picked him up, and took the two Austrians prisoners."

The following note regarding the German attention to Amiens appeared in the *Petit Journal* of the 10th inst.:—

"For the past two days German Taubes have renewed their custom of paying morning and evening visits to Amiens."

"Thanks, however, to the vigilance of French aviators and the activity of the anti-aircraft guns, they always keep to the north of the town, and have not dared to approach closely."

From the special correspondent of the *Temps* at Nancy the following information was received on the 10th :—

"Six German warplanes flew over Nancy to-day for forty minutes, and dropped thirty bombs indiscriminately. They caused material damage at various points, killing two and wounding ten. They also dropped bombs on Saint Mas, a suburb of Nancy, where there were several victims. The French artillery cannonaded the warplanes, and French aeroplanes pursued the raiders, and one German machine was evidently damaged."

The *Daily Mail* correspondent at Paris, in a message written on the 10th inst., said :—

"A German aeroplane of the Albatros type, numbered B 220, was brought down yesterday near Calais in a practically undamaged condition, the cause of the descent being a hole in the petrol tank."

"The pilot and officer observer were made prisoners. The former was slightly wounded. The Albatros was not armed, though the officer carried a revolver. Sixteen iron crosses were painted on the wings and tail of the machine, which has been taken to pieces and brought to Calais."

The *Times* correspondent in Paris on the 12th inst. reported :—

"Two Taubes flew over Compiègne yesterday morning and dropped bombs on an ambulance. About 100 arrows were also dropped. Each arrow bore the inscription 'Made in Germany on one side and on the other 'Invented in France.'"

Writing from the British Headquarters to the *Daily Telegraph* on Tuesday, Mr. Philip Gibb said :—

"Two German aeroplanes were brought down in our lines to-day to add to the list of those hostile machines whose audacity in reconnaissance has made them pay a heavy toll."

"The fate of one of them was preceded by an act of desperate bravery, which won the admiration of our men, in spite of their own peril. This Taube was sighted over our lines early in the morning. It was one of the latest types, armed with two machine-guns, one fore and one aft, and flew at great speed. Nevertheless, one of our own aeroplanes, with a smaller wing-spread and of lighter make, immediately mounted and gave chase. The enemy accepted the challenge, and a thrilling duel took place, the two machines circling about each other, manœuvring for position and firing at each other repeatedly."

"The combat was watched by many spectators. People came out of their cottages in their nightclothes, British officers looked out in their pyjamas, and passing British troops halted to watch the fight."

"The pilot of our aeroplane showed the finest skill in 'banking' about his adversary, and by a remarkable shot hit the German machine in the petrol tank. It began to fall and it was then clear to the two unhappy men in the biplane that they were dashing down to certain death. Yet, without losing their nerve or their pluck, they maintained the rapid fire."

"The men crashed to earth and both were killed, but the machine was not much damaged and may be flown by our own aviators."

"The second Taube, which appeared later in the day, was also hit in a vital part and burst into flame."

The *Times* correspondent at the British Headquarters thus described the same aerial fight :—

"To-day one of our officers succeeded in bringing down a German battle aeroplane of a new type and in killing both the pilot and the observer. The German machine was reported flying in a westerly direction at about 7 a.m. One of our machines immediately went up to engage it, and a magnificent duel in the air was fought out. Both machines were armed with quick-firing guns, but, although the German was the larger aeroplane, our pilot out-manœuvred his adversary, and riddled both his water and his petrol tanks. The disabled German machine plunged downwards, followed by our bullets, but it recovered when it had almost come to earth, and managed to fly up again in a westerly direction. Still our fire continued, and then the German machine gave a final plunge and fell into a ploughed field."

"The German aeroplane was of the single-fuselage and single-propeller type, but one peculiarity of it was that the seats were made on the swivel pattern, like piano stools. The machine, curiously enough, was very little damaged by its fall, and can easily be repaired and used by us. The British aeroplane was altogether undamaged."

Models

ALL communications in connection with this section should be addressed to the Model Editor, "FLIGHT," 44, St. Martin's Lane, London, W.C. Correspondents are requested to write on one side of the paper only.

An Early Flapping Wing Model.

IN turning over some old pictures we came across the photographs, reproduced on this page, of a flapping wing model made several years ago by Mr. John Henry Knight. In his letter enclosing them Mr. Knight said: I enclose three photos. of a flyer with flapping wings I made in spring of 1907. I had previously—in, I think, 1882—made a small model on Mr. Breary's plan, with wings of goldbeater's skin. This is a copy, on a much larger scale. From tip to tip of wings it was 5 ft. 10 ins. by 6 ft. From end to end a series of stretched rubber bands caused a double-throw crank to revolve; these cranks simultaneously worked the flappers. It would fly 16 or 18 yards, but always came down on a fairly even keel, the wings acting as a parachute. Note, in the side view of machine in flight, the curvature of the wings; the rear view shows machine coming down. I regret to see so little mention of Mr. Breary's experiments in about 1882. He showed me some four or five machines flying in the Greenwich lecture theatre; they flew very well.

The flapper appears to have the advantage of coming down comparatively safely. In model experiments with aeroplanes driven by screws, they sometimes turn right over, or pitch down on their head. Modern types of aeroplanes have been so successful that, I suppose, nothing will be done with the flapper and its concave wings; it cannot rival the aeroplane in speed, but possibly the parachute action of the wings may render it safer.

The U.S.A. National Model Competition.

The following particulars of the first of a series of model aeroplane contests for the Aero Club of America Prizes and the Henry S. Villard Trophy, which took place at the Garden City Aerodrome on a recent Sunday afternoon, have been received.

The competitors were:

The Aero Science Club of America, represented by Rudolph Funk, Egbert Lott, C. V. Obst and G. A. Cavanagh.

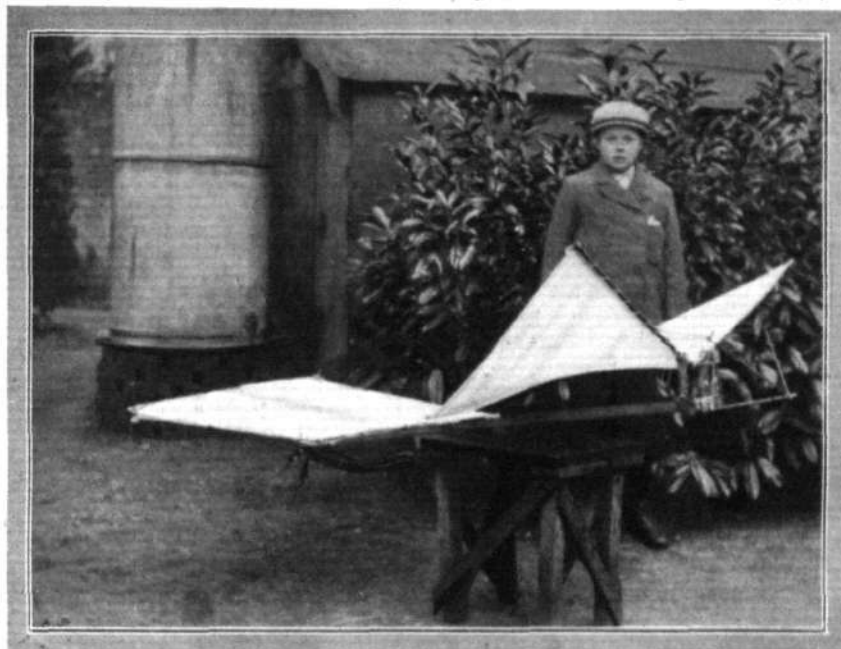
The Bay Ridge Model Aero Club, represented by T. H. Hodgman, jun., William Heil, L. J. Bamberger and Walter F. Bamberger.

The Harlem Model Aero Club, represented by Harry Schultz, Alfred K. Barker, J. Barker and George Bauer.

The contest was for distance flown by models of any type, launched by hand. The competitors took their place in turn at the starting line, model in hand, with the rubber motors tightly wound up, and launched their models in the air, where they soared up into the sky at an altitude varying from 25 ft. to 200 ft.

In spite of the 35 mile-an-hour wind some exceptional flights were made, and the results were as follows:—

| Aero Science Club of America— | | | Total. |
|-------------------------------|-------------------|------------|--------|
| Rudolph Funk | ... 1096-1429-50 | 2,575 feet | |
| Egbert Lott | ... 10-1231-680 | 1,921 " | |
| C. V. Obst | ... 200-1175-1866 | 3,241 " | |
| G. A. Cavanagh | ... 50 (wrecked) | 50 " | 7,787 |



Mr. J. H. Knight's flapping-wing model.

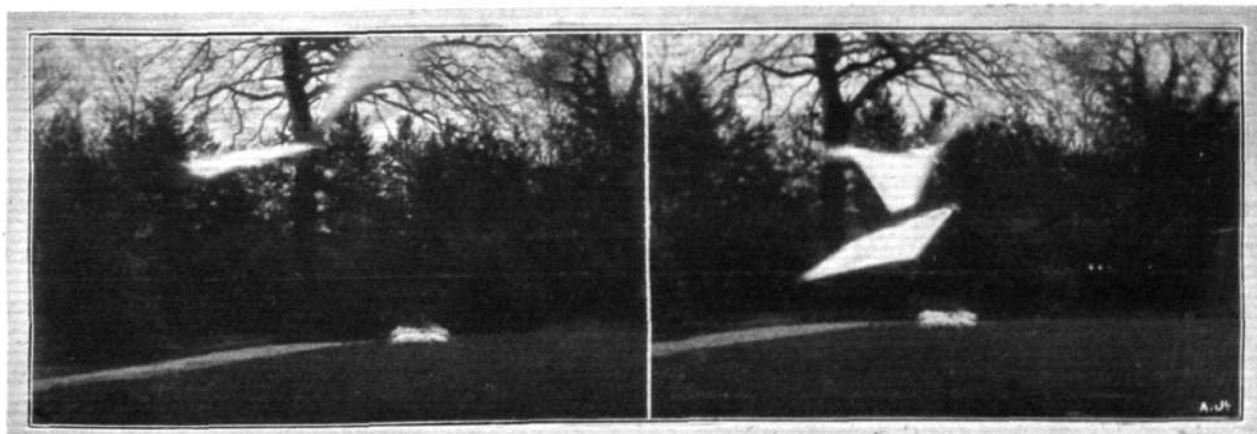
Bay Ridge Model Aero Club—

| | | | |
|--------------------|-----------------|------------|-------|
| T. H. Hodgman, Jr. | 646-300-250 | 1,196 feet | |
| William Heil | ... 250-100-471 | 821 " | |
| L. J. Bamberger | 200-590-50 | 840 " | |
| W. F. Bamberger | 398-150-461 | 1,009 " | 3,866 |

Harlem Model Aero Club—

| | | | |
|------------------|--------------------|---------|--------|
| Harry Schultz | ... 250-1070-300 | 1,560 " | |
| Alfred K. Barker | ... 1790-1990-250 | 4,030 " | |
| J. Barker | ... 1405-1414-1790 | 4,609 " | |
| George Bauer | ... 950-200-75 | 1,225 " | 11,424 |

The Judges, representing the Aero Club of America, were Messrs. Henry Woodhouse, L. D. Gardner, Henry S. Villard, Baron L. d'Orcy, G. Douglas Wardrop, Walter H. Phipps, and Burt M. McConnell.



Mr. J. H. Knight's flapping-wing machine in flight, and, on the right, settling down to earth again.

